

WRITTEN STATEMENT

of

KENNETH P. MORAN
Director, Office of Homeland Security
Enforcement Bureau
Federal Communications Commission

Hearing on
Hurricane Katrina and Communications Interoperability

Before the
Committee on Commerce, Science and Transportation
United States Senate

September 29, 2005

Good morning, Mr. Chairman and distinguished members of the Committee. My name is Ken Moran and I serve as the Director of the Federal Communications Commission's Office of Homeland Security. In that role, I am primarily responsible for coordinating the Commission's support of the Hurricane Katrina disaster relief efforts.

In my testimony today, I will describe some of the damage wrought by Hurricane Katrina to the communications industry and the Commission's efforts to assist consumers, the industries the agency regulates, and other Federal Agencies during this difficult crisis. I will also address the Commission's efforts to address public safety interoperability issues.

Hurricane Katrina caused catastrophic damage and massive flooding in areas of Louisiana, Mississippi, and Alabama. Moreover, Hurricane Rita caused additional damage to parts of Texas and southwestern Louisiana. The loss of life and damage to property is astounding, and our thoughts and prayers go out to those people affected by this disaster. As I am sure you are aware, most of the communications industry sustained tremendous damage to their facilities in the affected area, and the damage has had a significant impact. The damage to the communications infrastructure hampered the rescue operations of emergency responders. Relief efforts and survivors are still struggling with the effects of the hurricane. Survivors lack information about relief efforts. People displaced from their homes do not have the means to contact their loved ones to let them know they are safe. And of course, survivors remaining in the affected area lack a reliable means of contacting the authorities and getting help in life-threatening situations.

STATUS OF COMMUNICATIONS NETWORKS

Hurricane Katrina knocked out more than 3 million customer phone lines in the Louisiana, Mississippi, and Alabama area. The wireline telecommunications network sustained enormous damage both to the switching centers that route calls and to the lines used to connect buildings and customers to the network. Local wireless networks also sustained considerable damage – more than a thousand cell sites were knocked out of service by the hurricane. During this disaster, millions of telephone calls simply have not been able to get through. Of the 41 broadcast radio stations located in New Orleans and the surrounding area, only two AM and two FM stations remained on the air in the wake of the hurricane.

Through network outage reports filed in accordance with the Commission's rules, and through data given to us voluntarily by the industry, we understand that an extreme effort is being made to maintain and restore service in the disaster zone, including areas recently struck by Hurricane Rita. Broadcasters are making every effort to get stations on-the-air, even at significantly reduced power, to provide survivors with important information. Wireline and wireless carriers have crews working to repair switching centers, customer lines, and cell towers. Satellite service providers have helped bridge some of the gaps left by the outages by, for instance, providing satellite phones and video links to law enforcement officials, medical personnel, emergency relief personnel, and news outlets.

Even with these efforts, given the enormity of the disaster, many of the communications services in the affected areas remain down. Today, we understand that more than 250,000 customer lines remain out of service. More than 500 DS-3 equivalent

interoffice facilities remain down. Three public safety answering points remain out of service. Although many cell sites have been restored, more than 300 cell sites are still not operational in New Orleans, approximately 40 cell sites are not operational in Lake Charles, Louisiana, and more than 100 cell sites are not operational in Beaumont, Texas because of the damage inflicted by the recent hurricanes. Nearly 100 radio and television stations remain off the air. Many of the sites that are operational are dependent on back-up energy supplies.

COMMISSION ACTIONS

On August 30th, Chairman Martin established an internal Task Force consisting of senior executives and management from within the Commission. Chairman Martin directed the Task Force to coordinate the FCC's hurricane response efforts, which fall into two categories: (1) regulatory relief; and (2) industry outreach and coordination with other federal agencies. The Task Force has been working on these assignments continuously since August 30th, and the Commission was open throughout the Labor Day weekend to continue the work. To date, nearly 200 FCC employees have assisted in this effort.

Regulatory Relief

The Commission has taken a number of steps to facilitate the resumption of communications services in the affected areas and to authorize the use of temporary communications services for use by disaster relief personnel and evacuees in shelters.

At the start of the disaster, the Commission notified communications providers that it would provide streamlined treatment for requests for special temporary authority (STA)

in order to aid them in resuming and maintaining operations in areas impacted by Hurricane Katrina. The Commission did the same in response to Hurricane Rita.

In the aftermath of Hurricane Katrina and, more recently, Hurricane Rita, the Commission has devoted significant time and resources to enable first responders to communicate and to facilitate companies' ability to quickly restore communications services in the region. The FCC has granted more than 90 STA requests and over 100 requests for temporary frequency assignments. The Commission also has received a number of requests for temporary waiver of its rules. The Commission has granted each of these requests within 4 hours of receipt of all necessary information from the requestor, except in instances requiring coordination with other government agencies. Even in those cases, requests have been granted within 24 hours.

Among other things, these grants have enabled first responders to use "through-the-wall" imaging equipment to locate hurricane victims and allowed emergency response organizations to facilitate communications on the ground. Examples of the many additional steps the Commission has taken to assist disaster relief efforts and affected providers are listed in the attached appendix.

Industry Outreach and Coordination with Other Federal Agencies

The Commission has been working closely with industry as well as the Federal Emergency Management Agency (FEMA) and the National Communications System (NCS) pursuant to the procedures established in the National Response Plan. The Commission is continuously reaching out to communications companies serving the affected area – wireline and wireless network providers, broadcasters, cable providers, satellite providers – and to trade associations for these providers to assess the companies'

status and determine what they need to resume operations. These efforts include Commission staff contacting each of the broadcast stations in the affected region.

The FCC provides the critical information about resources that communications providers need to restore and maintain service in the affected area to FEMA and NCS, who are responsible for ensuring that priority needs are met. For instance, the Commission identified wireline central offices and radio and television broadcasters that could be operational if provided fuel to power on-site generators. The agency updates FEMA and NCS daily on evolving needs.

The Commission also is responsible for providing the National Coordinating Center (NCC) with information on communications companies' operational status for incorporation into the government-wide situation reports. Again, the agency gathers and submits this data daily.

In addition, the FCC has worked closely with the communications industry to help identify resources for use by disaster response personnel. The agency both transmits this information to NCC and facilitates industry's communication with other federal officials. For example, Commission staff coordinated discussions between FEMA and a major Direct Broadcast Satellite (DBS) provider to set up free televisions at disaster relief facilities and to provide a nationwide channel for disaster emergency services programming. Staff also worked with a wide range of providers – including those offering competitive facilities-based telecommunications, satellite, wireless, wireless internet access and Wi-Fi services – to identify those providers capable of offering facilities and services that can assist those in the affected area.

Finally, the Commission has been coordinating with the Interagency Coordinating Council on Individuals with Disabilities, organized by the Department of Homeland Security (DHS), to ensure that the needs of the disability community are addressed in the coordinated federal relief efforts.

INTEROPERABILITY

The Commission has taken several steps over the last few years to promote interoperability (i.e., radio communications between public safety agencies (usually of different jurisdictions) in furtherance of both day-to-day and emergency operations). To further interoperability, the Commission has provided additional spectrum to public safety entities; promoted technological developments that enhance interoperability; and provided its expertise and input on a number of interagency efforts.

Additional Spectrum

The Commission has designated approximately 97 MHz of spectrum exclusively for public safety use throughout the country. This includes 50 MHz of spectrum at 4.9 GHz and 9.5 MHz in the 800 MHz band. The Commission has designated certain channels in these bands specifically for interoperability. Frequencies designated for interoperability include 2.6 MHz of the 700 MHz band, 5 channels in the 800 MHz band, 5 channels in the 150 MHz band (VHF band), and 4 channels in the 450 MHz band (UHF band). In addition, although not specifically designated for interoperability, the 4.9 GHz band rules foster interoperability by providing a regulatory framework where traditional public safety entities can pursue strategic partnerships with others, including critical infrastructure entities, as necessary for the completion of their mission. Public safety

entities also will have access to an average of 4.5 MHz of additional spectrum in the 800 MHz band.

Promoting Technological Developments that Enhance Interoperability

Last year, the Commission resolved issues regarding public safety interference in the 800 MHz band that should promote effective and robust public safety communications.

In addition, to facilitate interoperability on a regional basis, the Commission reallocated television spectrum in the New York City area for public safety use to promote interoperability among area public safety entities. The Commission also has developed policies and rules to promote the sharing of spectrum. For example, the Commission's rules permit the shared use of radio stations where licensees may share their facilities on a non-profit, cost-shared basis with other public safety organizations, including Federal government entities, as end users.

Moreover, the Commission modified its rules to eliminate regulatory barriers to help speed introduction of software defined radio (SDR) technology. Radios traditionally have been built with unalterable hardware components that perform specific functions. SDR technology allows radios to cover multiple frequency bands and signal formats by simply sending different software instructions to a microprocessor instead of using additional (frequently bulky and heavy) parts. Although this technology is not yet available for public safety use, we are aware that public safety entities and industry are actively exploring these applications.

Interagency Efforts

The Commission has worked with the NCS and participating telecommunications providers to establish a regulatory framework that would facilitate Wireless Priority Access Service (PAS) being accessible and available during times of national emergencies. Under the PAS rules, authorized national security and emergency preparedness personnel users in emergencies may obtain access to the next available wireless channel to originate a call; however, the priority calls would not preempt calls in progress.

The Commission staff also has been working closely with the National Telecommunications and Information Administration, NCS and the Department of Homeland Security's SAFECOM to pursue initiatives that would advance the common goal of improving public safety communications interoperability. As a result of this collaboration, Federal government and state and local government entities have entered into strategic partnerships to plan, fund and implement shared communications systems.

As directed by the Intelligence Reform and Terrorism Prevention Act of 2004, the Commission is conducting a study to assess the spectrum needs of emergency response providers. As part of this study, Commission, NTIA, and DHS staff established a working group to facilitate the Commission's assessment of the short-term and long-term needs for allocations of additional portions of the electromagnetic spectrum for Federal, state, and local emergency response providers.

In light of recent events, we are looking closely to determine what additional steps we can take to address this critical need. Recently, Chairman Martin announced his

intention to create an independent expert panel to review the impact of Hurricane Katrina on the communications infrastructure. This panel will be composed of public safety and communications industry representatives and will make recommendations to the Commission regarding ways to improve disaster preparedness, network reliability, and communications among first responders such as police, fire fighters and emergency medical personnel. The panel will be specifically tasked with making recommendations regarding interoperability.

CONCLUSION

FCC Chairman Kevin Martin, Commissioners Kathleen Abernathy, Michael Copps and Jonathan Adelstein, along with the FCC staff, commend the industry and the tremendous efforts it has made to begin to repair the infrastructure and restore communications service to the Gulf Coast. These extraordinary efforts to restore communications services are being performed by employees of the communications industry – many of whom may be personally impacted by this tragedy. The Commission is continuing to work with other Federal agencies and the communications industry to determine what additional actions can be taken to assist in the disaster relief and restoration effort.

The damage wrought by Hurricane Katrina is tremendous and its effects will be felt for months and possibly years to come. The Commission stands ready to work with Congress, our colleagues at federal, state, and local agencies, and the American public to do whatever we can to help with the disaster relief and restoration efforts. I would be pleased to respond to your questions.

Appendix A

FCC Hurricane Katrina and Hurricane Rita Relief Efforts

As of September 28, 2005

The Commission continues its work to assist consumers, industries, and other Federal agencies with Hurricane Katrina and Hurricane Rita relief efforts. Below is a list of FCC actions taken since the start of these disasters. The list is arranged by service with state-specific actions noted separately. Public Notices and other decisions can be viewed on FCC-established Hurricane Katrina webpage (<http://www.fcc.gov/cgb/katrina/>) and the Hurricane Rita webpage (<http://www.fcc.gov/cgb/rita/>).

WIRELINER

General FCC Actions:

- FCC released an STA to SBC and its affiliates to allow the company to reroute traffic around damaged facilities to restore service as quickly as possible in the areas affected by Hurricane Rita (9/24/05).
- FCC granted an STA to Kaplan Telephone Company to operate facilities transmitting on cellular frequency Block B and frequencies available under Part 101 of the Commission's Rules at various sites located within CMA458, the Louisiana 5 - Beauregard RSA. Facilities will be used to restore communications facilities damaged as a result of Hurricane Rita (9/24/05).
- FCC granted a temporary waiver of a variety of procedural rules relating to the Universal Service Fund to carriers, state commissions, and other program beneficiaries, such as schools and libraries. Accordingly, affected entities in the hurricane-affected areas may postpone filing numerous USF forms, payments, and data, allowing affected parties adequate time to file appropriately (9/21/05).
- FCC granted a temporary waiver of Commission rules that require BellSouth and other incumbent LECs to provide advance notice and waiting periods before certain network changes may be implemented to help speed restoration of network services (9/21/05).
- FCC granted an STA giving BellSouth temporary authority to provide interLATA (long distance) services using its internal corporate network in order to relieve its over-burdened separate affiliate, BellSouth Long Distance (9/13/05).
- FCC granted a temporary waiver for certain carrier change requirements to allow customers whose long distance service has been disrupted by Hurricane Katrina to be connected to an operational long distance provider (9/5/05).
- FCC granted a temporary waiver of the FCC's rule for aging residential numbers for customers in the affected areas. Waiver of this rule will allow carriers, upon request, to disconnect temporarily customers' telephone service to avoid billing issues, and reinstate the same number when the service is reconnected for customers in the affected areas (9/4/05).
- FCC assisted LaFourche Telephone Company's restoration of long distance service (9/4-9/5/05).

- FCC provided BellSouth with information necessary to port the Mississippi Department of Wildlife's 800 number from Sprint to BellSouth because Sprint's facilities used to provide that number are down (9/4/05).
- FCC granted an STA for Verizon to use 4 microwave POPs in Baton Rouge to restore damage due to the hurricane (9/3/05).
- FCC granted the emergency request of the American Red Cross for reassignment of the toll free number 1-800-RED-CROSS to help in the disaster relief and coordination effort for the multi-state area affected by the hurricane (9/2/05).
- FCC provided authority to NeuStar (the North American Telephone Number Administrator) and other service providers to use local number portability technology to reroute telephone traffic to switches unaffected by the hurricane (9/1/05).
- FCC granted a 60-day extension to carriers operating in Louisiana, Mississippi, or Alabama for the filing of Form 477 local competition and broadband data. This extension also applied to carriers that rely on personnel, facilities, or records located in these states (9/1/05).
- FCC reached out to VoIP service providers in Alabama, Louisiana, and Mississippi to determine whether adjustments were needed in the filing deadline for VoIP E911 status report due September 2, 2005 (8/31/05).

WIRELESS

General FCC Actions:

- FCC granted an STA to Mississippi Power Company to operate an 18 GHz microwave link in the Gulf of Mexico Area of its service territory for emergency repair work necessary because of hurricane-related damages (9/27/05).
- FCC issued a Public Notice that provides information to wireless licensees in the affected areas about STAs, FCC points of contact for various radio services, rule sections addressing "emergency communications," and a the temporary waiver of application filing deadlines (e.g., renewals, construction notifications, discontinuance notices, etc.), construction requirements, and discontinuance of service requirements (9/24/05).
- FCC released a Public Notice to list the names and contact information of the FCC-certified frequency coordinators for land mobile radio operations and coordinating bodies for microwave radio operations (9/24/05).
- FCC granted an STA to PetroCom to use the 3700-4200 and 5925-6425 MHz bands to restore its digital backhaul operations to a new location (9/23/05).
- FCC granted an STA to SkyTel Corp. for operation in the 3.65 GHz band in support of Hurricane Katrina relief efforts to provide temporary wireless Internet communications to various relief groups, federal, state and local government agencies ,and businesses in the greater disaster areas left by Hurricane Katrina. The STA was granted for fixed and mobile operations in and around Biloxi, New Orleans, and Mobile. The Biloxi operational request required coordination with NTIA (9/21/05).

- FCC granted an STA to Chevron USA, Inc. to use frequency in the Gov/Non-Gov M941 – M944 shared band for the purpose of restoring communications capabilities damaged by Hurricane Katrina (9/15/05).
- FCC modified the STA previously granted on 9/2/05 to Verizon for Rivada to allow leasing of spectrum to Ericsson on behalf of Northcom (9/9/05).
- FCC granted an STA to the North Carolina Forestry Commission to operate VHF mobile units in the disaster area (9/8/05).
- FCC released a Public Notice to list the names and contact information of the FCC-certified frequency coordinators for land mobile radio operations and coordinating bodies for microwave radio operations (9/7/05).
- FCC released a Public Notice to ensure that wireless service providers do not improperly disconnect consumers displaced by the hurricane because they are unable to pay their bills (9/7/05).
- FCC granted an STA to Florida Power and Light to use 900 MHz frequencies in Louisiana, Mississippi, and Alabama for electric power maintenance and restoration (9/7/05).
- FCC granted an STA to Detroit Edison to use VHF and UHF frequencies in hurricane-affected areas (9/7/05).
- FCC informed amateur radio operators that they have the authority to make transmissions necessary to meet essential communication needs and facilitate relief actions and that prior FCC approval is not required (9/1/05).
- FCC issued a Public Notice that provides information to wireless licensees in the affected areas about STAs, FCC points of contact for various radio services, rule sections addressing “emergency communications,” and the temporary waiver of application filing deadlines (e.g., renewals, construction notifications, discontinuance notices, etc.), construction requirements, and discontinuance of service requirements (9/1/05).
- FCC granted STA to BellSouth to use GMRS radios (commercially available walkie talkie-type radios that require licenses) in support of restoration of communications facilities in Florida, Alabama, Louisiana, and Mississippi (8/31/05).
- FCC granted an STA to Detroit Edison Company to operate on eleven VHF mobile frequencies in Florida in support of restoration of electrical service to areas affected by Hurricane Katrina (8/31/05).
- FCC granted an STA to Ameren, a utility services company licensed in the Industrial Radio Service, to operate outside its licensed area of operation due to hurricane relief (8/31/05).

Louisiana-Specific Actions:

- FCC granted STAs to Verizon to use 13 microwave paths (10 and 18 GHz) in New Orleans, LA, to restore communications due to damage from Hurricane Katrina (9/22/05).

- FCC granted an STA to Verizon to use an 18 GHz microwave path in New Orleans, LA, to restore communications due to damage from Hurricane Katrina (9/21/05).
- FCC granted an STA to Current Electric Company in Metairie, LA, to operate 6 GMRS radios for electric service repair (9/20/05).
- FCC granted an STA to Verizon to use 6 microwave paths (18 and 10 GHz) in the New Orleans, LA area to restore communications due to damage from Hurricane Katrina (9/16/05).
- FCC granted an STA to Chevron USA, Inc. to use frequency pair 451/456.3125 MHz in Plaquemines County, LA, to replace communications lost in Chevron's Venice offshore loading facilities when Nextel's facilities sustained damage (9/16/05).
- FCC granted an STA to the State of Louisiana to use twenty 700 MHz frequency pairs in New Orleans, LA, to replace all first responder's public safety communications (9/16/05). These channels are in addition to those 700 MHz channels authorized under their state license.
- FCC modified the STA previously granted on 9/3/05 to Verizon to use 4 microwave POPs in Baton Rouge to restore damage due to the hurricane (9/15/05).
- FCC granted an STA to Cingular Wireless LLC to operate on PCS spectrum at two sites located in Columbia and Monroe, LA, to provide critically needed communications services in support of the relief effort from Hurricane Katrina (9/14/05).
- FCC granted an STA to BellSouth to operate two microwave paths on 18 GHz microwave and fixed satellite service frequencies as part of emergency radio systems that help restore BellSouth's telecommunications to the New Orleans area (9/14/05).
- FCC granted an STA to Chevron USA, Inc. to use a single base frequency 451.1125 MHz and five mobile frequencies in Plaquemines County, LA, to replace communications lost in Chevron's storage facility when Nextel's facilities sustained damage (9/14/05).
- FCC granted an STA to Amoco Production Company to use frequency 153.335 MHz within 40 KM of the Mandelville, LA, area for restoration of petroleum facilities (9/12/05).
- FCC granted an STA to the State of New Jersey to operate a repeater and 200 mobiles on 806/851.3375 MHz in New Orleans for law enforcement assistance (9/12/05).
- FCC granted an STA to Texas Utilities to operate station WPFM603 in Louisiana (currently operation is limited to Texas only) for restoration of utilities (9/12/05).
- FCC granted an STA to Chevron to operate 900 MHz microwave links from the coast at Leeville, LA, and Coden, AL, to offshore platforms in the Gulf of Mexico (9/9/05).
- FCC granted an STA to Motorola to use channels licensed to Saint John the Baptist Parish and Jefferson Parish in New Orleans for public safety; the Parishes' systems are not operational due to storm damage, and the Parishes have consented to Motorola's request (9/9/05).

- FCC granted an STA to Chemtura Corp. for one base frequency and ten mobile frequencies in the 460 - 470 MHz band in the Saint Charles County, LA area (9/9/05).
- FCC granted an STA to the California Highway Patrol to operate portable and mobile radios in support of other law enforcement and relief agencies in Louisiana (9/6/05).
- FCC granted an STA to Duke Energy to operate an 800 MHz system near Tangipahoa Parish in Louisiana (9/6/05).
- FCC granted an STA to LifeCom/Air Methods to set up a control center with mobile radio communications in the 460 MHz band in the New Orleans area for disaster relief (9/6/05).
- FCC granted an STA to Alltel to operate a 17-watt short range cellular system in direct support of the FEMA Director. The system will operate initially from Baton Rouge and will later be moved to the New Orleans Superdome (9/3/05).
- FCC granted an STA to Cingular wireless to operate on microwave frequencies at on 6 GHZ microwave frequencies at 21 sites in Louisiana (9/2/05).
- As part of a Public Notice in the 800 MHz proceeding initiating “Wave 2” negotiations in the 800 MHz rebanding process, FCC granted a request from the 800 MHz Transition Administrator to move Louisiana from Wave 2, which begins in October 2005, to Wave 3, which begins in January 2006. This will enable public safety entities in Louisiana to focus on immediate public safety needs (9/2/05).
- FCC granted Alcatel an equipment authorization for a new digital microwave radio system that will be deployed by Verizon Wireless in Baton Rouge and the southern Louisiana area for transport facilities to replace equipment lost in the hurricane (9/1/05).

Mississippi-Specific Actions:

- FCC granted an STA to Clearwire to allow operation in BTA 042 (Biloxi-Gulfport-Pascagoula, MS) to permit service in and around Biloxi, MS, and to the Hancock Medical Center in Bay Saint Louis, MS, to provide Internet services and computers for access by victims (9/16/05).
- FCC granted an STA to Sea Tow International to use Marine VHF channel 7 in Harrison County, MS, and marine channel 8 in Hancock County, MS, to provide marine rescue and recovery services (9/14/05).
- FCC granted an STA to an amateur radio operator providing communications services to the American Red Cross in Ocean Springs, Mississippi, to operate on High Frequency bands that he could not otherwise use (9/11/05).
- FCC granted an STA to the California Highway Patrol to operate portable and mobile radios in support of other law enforcement and relief agencies in Mississippi (9/6/05).

Alabama-Specific Actions:

- FCC granted an STA to Regional Paramedical Services to operate on 5 VHF public safety channels in southern and central Alabama to facilitate movement of hurricane victims and medical supplies (9/22/05).
- FCC granted an STA to the Marengo County Commission in Demopolis, Alabama, to operate on two VHF public safety frequencies (156.12 and 159.12) for mobiles and base stations within the county (9/8/05).

Tennessee-Specific Actions:

- FCC granted an STA to a Red Cross office to use GMRS frequencies to provide security and support in Knoxville, TN (9/7/05).

Texas-Specific Actions:

- FCC granted and STA to Motorola to use frequency pairs 896/935.4500, 896/935.4750, 897/936.4250, and 899/938.4000 MHz for the restoration of service in refineries and chemical plants in the Port Arthur and Beaumont, TX areas due to the impact of Hurricane Rita (9/26/05).

BROADCAST AND CABLE

FCC Actions:

- FCC issued a Public Notice that extends the deadline for television broadcast stations to make retransmission consent/must carry elections on cable and satellite systems in certain designated market areas affected by Hurricane Rita (9/28/05).
- FCC released a Public Notice to help radio and television stations resume and maintain broadcast operations to residents of the affected areas by outlining streamlined instructions to apply for STAs and by waiving requirements that stations notify the FCC within 24 hours of using emergency antennas (9/24/05).
- FCC released a Public Notice to assist cable television and other multichannel video programming distributors in the affected areas by outlining streamlined instructions to apply for STAs to install temporary facilities or modify existing facilities and by waiving certain technical requirements (9/24/05).
- FCC granted an STA for silent authority to WLVV-AM, WLVV, Inc., Mobile, AL (9/15/05).
- FCC released a Public Notice to extend retransmission consent/must carry elections in areas affected by Hurricane Katrina (extension from October 1, 2005 to November 15, 2005) (9/14/05).
- FCC granted an STA for silent authority to two LPTV stations: W30ID, New Orleans, and W36CU, Gulfport (9/12/05).
- FCC granted an emergency authorization to the Houston Independent Media Center for use of a low power FM system on 95.3 MHz to broadcast emergency information to evacuees housed in the vicinity of the Astrodome from an area adjacent to the Astrodome (9/11/05).

- FCC granted an application from Austin Airwaves to operate stations on 94.9, 95.3, and 99.5 MHz to broadcast emergency information to evacuees inside the Astrodome (9/5/05). As of 9/8/05, Harris County officials have suspended use of these stations within the Astrodome.
- FCC released a Public Notice to remind video program distributors of the need to make emergency information regarding Hurricane Katrina evacuation and relief effort accessible to persons with hearing and vision disabilities (9/9/05).
- FCC granted an extension for the FCC Cable Horizontal and Vertical Ownership Limits Proceeding Reply Period (9/8/05).
- FCC released a Public Notice to extend the Auction No. 84 settlement period for certain mutually exclusive AM auction applications and for the submission of Section 307(b) showings; extension given from September 16, 2005 to October 31, 2005 (9/7/05).
- FCC created database to capture information about AM/FM/TV broadcasters impacted by the hurricane (9/4/05).
- FCC released a Public Notice waiving certain noncommercial educational (NCE) rules to permit NCE television and radio stations in the New Orleans area to simulcast and rebroadcast commercial station programming (9/2/05).
- FCC compiled information regarding the radio and television broadcast operations in Louisiana, Mississippi, and Alabama through direct calls and e-mails to over 150 AM/FM/TV broadcasters in the area; continually updating information and referring needs to other federal agencies (9/1/05-Present).
- FCC granted waivers to the following non-commercial FM and TV stations to permit them to air fundraising programming to aid disaster relief efforts (9/1/05-present):
 - Association of Public Television Stations, for all its member public television stations to permit interruptions in regular programming for fundraising
 - National Public Radio, on behalf of its affiliates, to permit interruptions in regular programming for fundraising for victims and for NPR affiliates directed affected by the hurricane
 - National Federation of Community Broadcasters, on behalf of its 183 member stations, to permit interruptions in regular programming for fundraising
 - KXPW-LP, Georgetown, TX – two week fundraising effort
 - WITF-FM, Harrisburg, PA, for one-minute fundraising spots, from 9/9/05 to 9/30/05
 - WBGO, Newark, NJ, for four-hour benefit concert from Lincoln Center, to air 9/17/05
 - Arkansas Educational Television Commission on behalf of its five-station network
 - Greater Cincinnati Television Educational Foundation to permit fundraising by WCET-TV
 - KRFC(FM), Fort Collins, CO, to permit the broadcast of an 8-hour benefit concert on 9/3/05

- Grand Valley State University, Michigan Association of Public Broadcasters, and Michigan Public Radio Network, on behalf of Michigan NCE radio and television stations to permit interruptions in regular programming for fundraising
 - KATB(FM), Anchorage, AK, to permit interruptions in regular programming to air pre-produced 30- and 60-second segments supporting the North American Mission Board's Disaster Relief efforts, running from 9/2/05-9/9/05
 - WACC-LP, Enfield, Connecticut, to promote and air coverage of a fundraising car wash to be held on 9/10/05; proceeds to be donated to the American Red Cross
 - WRNK-LP, Lanett, Alabama, to make announcements requesting that listeners drop off certain items (bottled water, personal hygiene items, etc., but not cash or other money) from 9/6/05-9/8/05; donated items will be taken to the New Life Family Church in Biloxi, MS
 - WHCF-FM, Bangor, ME, to conduct an on-air fundraiser soliciting pledges for Operation Blessing International, a relief agency based in Virginia Beach, VA
 - KTIS-FM, Minneapolis, MN, to participate in a fundraising campaign with at least 24 other stations in the market on 9/9/05; funds raised will be given to the Red Cross
 - KULA-LP, Ili'ili, American Samoa, to permit KULA-LP to broadcast a fundraising program to benefit disaster relief efforts on 9/8/05
 - WVUA-FM, Tuscaloosa, AL, to permit the station to promote a fundraising concert to be held on 9/9/05; this is a periodic fundraiser for the station – in this instance, 25% of the proceeds will be donated to the Red Cross
 - KBCS-FM, Bellevue, WA, to permit the station to air fundraising requests to help rebuild NCE station WWOZ, New Orleans
 - WETD, Alfred, NY, to permit the station to air a live broadcast of a “Coins for Katrina Benefit Concert” on 9/11/05
 - Public Radio Partnership, on behalf of WFPL(FM), WUOL-FM, and WFPK(FM), Louisville, KY, for a one-day fundraising effort on 9/24/05 for Goodwill and the Coalition for the Homeless
- FCC released a Public Notice to help radio and television stations resume and maintain broadcast operations to residents of the affected areas by outlining streamlined instructions to apply for STAs and by waiving requirements that stations notify the FCC within 24 hours of using emergency antennas (8/31/05).
 - FCC released a Public Notice to assist cable television and other multichannel video programming distributors in the affected areas by outlining streamlined instructions to apply for STAs to install temporary facilities or modify existing facilities and by waiving certain technical requirements (8/31/05).

Louisiana-Specific Actions

- FCC granted an STA to St. Bernard Parish, LA, to operate two TIS stations on 660 kHz to inform returning evacuees of emergency information such road conditions, location of medical aid stations, etc. (9/27/05).

- FCC granted an STA for silent authority to WBOK-AM, Christian Broadcasting Corporation, New Orleans, LA (9/15/05).
- FCC granted an STA for silent authority to WDSU-TV and WDSU-DT, Hearst-Argyle Television, New Orleans, LA (9/15/05).
- FCC granted an STA for silent authority to KMRL-FM, White Dove Fellowship, Buras, LA (9/14/05).
- FCC granted an STA for silent authority to WTUL-FM, Tulane Educational Fund, New Orleans, LA (9/14/05).
- FCC granted tolling pursuant to Section 73.3598(b)(1) via letter to American Family Association, extending the period to construct KSUL-FM, Port Sulphur, LA, by at least six months (9/14/05).
- FCC granted 90 additional construction days via letter to Star Over Orlovista, permittee of WEUS(AM), Orlovista, FL (9/14/05).
- FCC granted an STA for silent authority to WHNO-TV, CH 20, New Orleans, LA (9/13/05).
- FCC sent a letter to Equity Offices, in Louisiana, to expedite entrance by station staff to WUPL-TV facility located in Jefferson Parish, LA (9/13/05).
- FCC granted an emergency authorization pursuant to the Salvation Army to operate an emergency FM station on 107.9 MHz to broadcast to residents and recovery workers in New Orleans, LA (9/12/05).
- FCC granted an STA for WWOZ(FM), Friends of WWOZ, Inc., New Orleans, LA, to remain silent; station has been silent since August 27, 2005 (9/9/05).
- FCC granted an STA for WVUE and WVUE-DT, LA, licensed to Emmis Television, to remain silent (9/8/05).
- FCC granted an STA for WWL-DT (WWL's digital station), New Orleans, LA, licensed to Belo Corporation, to remain silent (9/8/05).
- FCC granted an STA for WTIX-AM, WTIX, Inc., New Orleans, LA, that ceased operations on August 29, 2005, to remain silent (9/7/05).
- FCC granted an STA for WTNO-LP, New Orleans, LA, licensed to Tiger Eye Finance, Inc., to remain silent (9/7/05).
- FCC granted an STA for WWNO(FM), New Orleans, LA, to operate from its licensed site with an emergency antenna and reduced power (9/7/05).
- FCC granted an STA for stations licensed to American Family Association in Louisiana that ceased operations on August 28, 2005, to remain silent (9/6/05).
- FCC granted an STA to WUPL(TV) of Slidell, LA, to remain silent for 60 days (9/1/05).

Mississippi-Specific Actions:

- FCC expedited grant of program test authority and covering license for major facilities upgrade to WBBN, Taylorsville, MS, providing greatly increased coverage area (9/13/05).
- FCC granted an STA to permit Mississippi Public Broadcasting, licensee of NCE station WMAH-TV, Biloxi, MS, to rebroadcast September 11 NFL games of the New Orleans Saints and Green Bay Packers (9/8/05).
- FCC granted an STA to Hancock County Emergency Management to operate an emergency FM station on 103.5 MHz to broadcast to the Bay City-Wavelend-Shoreline Park, Mississippi area; we understand this to be the only station operating in the area (9/8/05).
- FCC granted an STA for stations licensed to American Family Association in Mississippi that ceased operations on August 28, 2005, to remain silent (9/6/05).
- FCC granted an STA for WFMM(FM), Telesouth Communications, Inc., Sumrall, Mississippi, to remain silent after it went silent on 8/29/05 (9/6/05).

SATELLITE

General FCC Actions:

- FCC granted 2 STAs to MCI to operate up to 200 VSAT remote terminals to facilitate communication restoration efforts and/or carry network traffic of terminals that have been damaged by Hurricane Katrina and/or Rita in the conventional Ku-Band (9/28/05).
- FCC granted an extension of an STA to Iridium to provide MSS service in the 1616-1618.25 MHz band on an unprotected non-interference basis (9/23/05).
- FCC granted an STA to Stratos to operate a Ku-band hub earth station in connection with its VSAT authorization (9/21/05).
- FCC granted Harris the authority to operate twelve temporary-fixed earth stations to transmit voice and data communications between points in the Gulf Coast Region and various agencies in Florida in their disaster relief efforts (9/21/05).
- FCC granted an STA to Loral Skynet to position 20 VSAT remotes at various sites for use by FEMA in conjunction with its relief efforts (9/20/05).
- FCC granted an STA to BBC News to use 1.2 Meter temporary -fixed Ku-Band antenna to provide news coverage of the Hurricane Katrina aftermath (9/19/05).
- FCC granted an STA to PetroCom for use of a C-Band antenna to restore its digital backhaul operations from the Gulf of Mexico (9/13/05).
- FCC granted an STA for Maritime Telecommunications Network to use 5 conventional Ku-band earth stations for communications in the area affected by the hurricane (9/10/05).
- FCC granted an STA to Viasat to operate conventional Ku-Band VSAT to provide Internet access service to FEMA (9/7/05).

- FCC granted an STA to BJ Services to operate conventional Ku-Band VSAT remotes to reinitiate Internet access services lost by Katrina (9/7/05).
- FCC granted an STA to ARD German Television to use a suitcase antenna on a German satellite newsgathering truck to provide news coverage (9/5/05).
- FCC granted an STA to Maritime Telecommunications Network to operate 5 satellite dishes providing transportable Internet access (9/4/05).
- FCC granted an STA to MTN to offer satellite Internet access on 3 government-run cruise ships (9/4/05).
- FCC granted an STA to Canada TV to use a transportable satellite news gathering truck (9/3/05).
- FCC granted an STA to Iridium to use spectrum owned by Globalstar to increase Iridium's capacity (9/2/05). Iridium has turned on its equipment on this frequency and no interference problems have been reported.
- FCC granted an STA to Loral Skynet for authority to use a satellite dish transportable on a Humvee to provide free VoIP and Internet access at the site of the relief efforts (9/2/05).
- FCC released a Public Notice to help satellite and submarine cable providers maintain operations to emergency communications services in the affected areas by outlining streamlined instructions to apply for STAs (9/1/05).
- FCC granted an STA to Independent Television News to use satellite spectrum to serve a transportable news gathering truck from London in support of hurricane relief (9/1/05).

Louisiana-Specific Actions:

- FCC granted an STA to VSL Networks to use a Ku-band antenna to provide service to Motorola in support of the Louisiana state police (9/7/05).

Mississippi-Specific Actions:

- FCC granted an STA to Telenor Satellite Services to operate one 1.8 meter temporary fixed C-Band antenna to communicate with NSS-7 @ 2.2 W.L. at Camp Barron Point, MS (9/16/05).
- FCC granted an STA to permit Telenor Satellite Services to operate a 2.4 meter temporary fixed C-Band antenna on a hospital ship at Bay St. Louis, MS (9/9/05).

COORDINATION WITH NTIA

- FCC assisted with NTIA's grant of STAs for the U.S. military to use 75 frequencies.
- FCC granted an STA to Intel Corporation for operation in the frequency band 3650 - 3700 MHz to provide wireless services for relief center located at Kelly Air Force Base, Texas (9/8/05).

- In coordination with NTIA, FCC granted an STA to Intel Corporation for operation in the frequency band 3485.5 - 3585.5 MHz to provide wireless services for relief center located at Kelly Air Force Base, Texas (9/8/05).
- In coordination with NTIA, FCC granted an STA for Intel to set up a WiMax system in the area from Biloxi and New Orleans to provide Internet connectivity to 225 Red Cross Disaster Centers (9/3/05).
- In coordination with NTIA, FCC granted an STA request from Time Dominion for authorization to use high power ultra-wide band equipment for through-the-wall imaging system operations (9/2/05).